

CLAIMS

We claim:

- 1 1. A system for managing rubber-covered cylinder sleeves for an offset rotary
2 printing machine, said system comprising
3 a storage apparatus for storing said sleeves when not in use in said printing
4 machine;
5 a main electronic memory device into which characteristic data for each sleeve
6 can be entered, stored, and managed;
7 means for introducing the sleeves into the storage apparatus;
8 means for reading the characteristic data into the memory device as one of the
9 sleeves is introduced into the storage apparatus; and
10 means for removing one of said sleeves from the storage apparatus in accordance
11 with predefined data and said characteristic data.

- 1 2. A system as in claim 1 wherein said characteristic data comprise at least
2 one of data which identify the individual sleeve and operating data and data about damage status.

- 1 3. A system as in claim 1 wherein said storage has individual sleeve storage
2 spaces which are arranged at least one of beside one another and above one another and behind
3 one another and such that they can circulate and such that they can be moved.

- 1 4. A system as in claim 3 wherein said individual sleeve storage spaces can
2 be moved to a storage and removal position.

1 5. A system as in claim 1 further comprising an identifier arranged on each
2 sleeve, said characteristic data for each sleeve being assignable to the respective identifier and
3 readable into the main memory device at the time of storage.

1 6. A system as in claim 1 further comprising an auxiliary electronic memory
2 device assigned to each said sleeve, said auxiliary electronic memory device carrying an identity
3 number by means of which the characteristic data can be assigned to the respective sleeve and
4 read into the main memory device at the time of storage.

1 7. A system as in claim 6 wherein said identity number can be read from the
2 auxiliary memory device into the main memory device at the time of storage.

1 8. A system as in claim 1 further comprising an auxiliary electronic memory
2 device assigned to each said sleeve, said characteristic data being stored on the auxiliary memory
3 device and read into the main memory device at the time of storage.

1 9. A system as in claim 5 further comprising one of a data reader and a
2 scanner by means of which the identifier can be read into the main memory device, at least one
3 of the characteristic data that can be assigned to the identifier and changed characteristic data and
4 data about damage status being exchangeable between the main memory device and computing
5 and memory devices of printing machines, and being stored on the respective memory devices.

1 10. A system as in claim 6 further comprising a data reader by means of which
2 the identity number can be read from the auxiliary memory device into the main memory device,
3 at least one of the characteristic data that can be assigned to the identifier and changed

4 characteristic data and data about damage status being exchangeable between the main memory
5 device and computing and memory devices of printing machines, and being stored on the
6 respective memory devices.

1 11. A system as in claim 10 comprising one of said data readers associated
2 with said storage apparatus and with each of a plurality of printing units.

1 12. A system as in claim 11 wherein said data readers are configured as data
2 exchange devices, whereby said characteristic data can be exchanged between the main memory
3 device and the computing and memory devices of printing machines and stored.

1 13. A system as in claim 6 wherein said auxiliary memory device provides
2 means for data transmission and exchange between the main memory device and computing and
3 memory devices of the printing machines.

1 14. A system as in claim 6 wherein said auxiliary memory device comprises a
2 transponder.

1 15. A system as in claim 8 wherein data is read from said auxiliary memory
2 device without contact.

1 16. A system as in claim 1 further comprising computing and memory devices
2 of a printing machine, said main memory device being integrated into at least one of said
3 computing and memory devices.

1 17. A system as in claim 1 further comprising computing and memory devices
2 for printing machines, said main memory device and said computing and memory devices being
3 integrated into at least one memory unit.

1 18. A system as in claim 1 further comprising a transport apparatus for
2 transporting the sleeves from the storage apparatus to the printing machine.

1 19. A system as in claim 1 further comprising means for identifying the
2 sleeves arranged on the storage apparatus.

1 20. A system as in claim 2 further comprising means for determining data
2 about the damage status of the rubber-covered cylinder sleeves.

1 21. A system as in claim 2 further comprising a hand-held input device into
2 which data about the damage status of the sleeves can be entered.

1 22. A system as in claim 20 further comprising computing and memory
2 devices for printing machines, said data about damage status being transmitted to one of the main
3 memory device and the computing and memory devices.

1 23. A system as in claim 1 further comprising means for automatically
2 initiating and carrying out ordering of new sleeves by means by said characteristic data stored in
3 said main memory device.

1 24. A system as in claim 1 further comprising means for calculating statistics
2 about the probability of failure of the sleeves by means by said characteristic data stored in said
3 main memory device.

1 25. A system as in claim 1 further comprising an auxiliary electronic memory
2 device arranged on each said sleeve, said characteristic data being stored on the auxiliary
3 memory device and read into the main memory device at the time of storage.

1 26. A system as in claim 25 further comprising a main data exchange device
2 by means of which the characteristic data can be read from the auxiliary memory device into the
3 main memory device, and at least one of new characteristic data and changed characteristic data
4 and data from the main memory device can be written and stored on the auxiliary memory
5 device.

1 27. A system as in claim 25 further comprising a computing and memory
2 device for each printing machine and an auxiliary data exchange device arranged in each printing
3 unit, said characteristic data being read from the main memory device into the computing and
4 memory device by said auxiliary data exchange device, and at least one of new characteristic
5 data and changed characteristic data from the computing and memory device can be written on
6 said auxiliary memory device.

1 28. A system as in claim 25 further comprising a computing and memory
2 device for each printing machine, said auxiliary memory device providing data exchange
3 between the computing and memory device and the main memory device.

1 29. A system as in claim 25 wherein each said auxiliary memory device
2 comprises a transponder.

1 30. A system as in claim 26 wherein data is between said auxiliary memory
2 device and said main data exchange device without contact.

1 31. A system as in claim 25 further comprising a computing and memory
2 device for each printing machine, and means for determining data about the damage status of the
3 rubber-covered cylinder sleeves and transmitting the data to at least one of the main memory
4 device and the computing and memory devices.

1 32. A system as in claim 25 further comprising a computing and memory
2 device for each printing machine and a hand-held input device into which data about the damage
3 status of the sleeves can be entered and transmitted to at least one of the main memory device
4 and the computing and memory devices.

1 33. A system as in claim 1 wherein said main electronic memory device
2 comprises an interface which is accessible from an external location.

1 34. A system as in claim 33 wherein the characteristic data stored in the main
2 memory device can be called up from the external location via the interface, and new
3 characteristic data can be transmitted into the memory device via the interface and stored.

1 35. A rubber covered cylinder sleeve for offset printing, said sleeve
2 comprising an inner support sleeve, a rubber layer arranged on said inner support sleeve, and an
3 electronic memory device containing characteristic data about the sleeve.

1 36. A rubber-covered cylinder sleeve as in claim 35 wherein said memory
2 device is embedded in the rubber layer.

1 37. A rubber covered cylinder sleeve as in claim 35 wherein said electronic
2 memory device does not effect any widening of the rubber-covered cylinder sleeve.

1 38. A rubber-covered cylinder sleeve as in claim 35 wherein said rubber layer
2 has a non-printing marginal area, said memory device being arranged in said non-printing
3 marginal layer.

1 39. A rubber-covered cylinder sleeve as in claim 35 wherein said memory
2 device comprises a transponder.

1 40. A rubber covered cylinder sleeve as in claim 35 wherein, by means of a
2 data exchange device, the characteristic data can be read from the memory device, and at least
3 one of new characteristic data and changed characteristic data can be written and stored on the
4 memory device.

1 41. A rubber-covered cylinder sleeve as in claim 40 wherein said data
2 exchange device is at least one of arranged in a printing machine and configured as a portable
3 hand-held device.

1 42. A rubber-covered cylinder sleeve as in claim 40 wherein the data
2 exchange between the memory device and the data exchange device takes place without contact.

1 43. A rubber-covered cylinder sleeve as in claim 40 wherein the data-
2 exchange device can be operated by hand.

1 44. A rubber-covered cylinder sleeve as in claim 40 wherein the data
2 exchange device is connected to a computing and memory unit in which the characteristic data
3 can be calculated.

1 45. A rubber-covered cylinder sleeve as in claim 43 wherein the data
2 exchange device is connected to a machine control system of a printing machine.

1 46. A rubber-covered cylinder sleeve as in claim 44 wherein the characteristic
2 data can be transmitted manually by an operator to the computing and memory unit.

1 47. A method of managing rubber-covered cylinder sleeves for offset printing,
2 said method comprising
3 equipping each said sleeve with an identifier,
4 assigning characteristic data about each sleeve to the respective identifier,
5 reading said characteristic data from said identifiers into a computing and
6 memory device of a rotary printing machine,
7 transmitting said characteristic data from said computing and memory devices to
8 a main memory device of a storage apparatus for said sleeves, and

9 storing said characteristic data in said main memory device.

1 48. A method of managing rubber-covered cylinder sleeves for offset printing,

2 said method comprising

3 equipping each said sleeve with an auxiliary memory device,

4 applying characteristic data about each said sleeve to the respective memory

5 device while said sleeve is still located in a printing unit, and

6 transmitting said characteristic data from said auxiliary memory device to a main

7 memory device of a storage apparatus for said sleeves when said sleeve is stored in said storage

8 apparatus.